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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,401	03/25/2005	Joanne J. Fillatti	16518.145	7282
28381 ARNOLD & P	590 07/02/2007 RTER LLP		EXAMINER	
ATTN: IP DOCKETING DEPT.			WORLEY, CATHY KINGDON	
	H STREET, N.W. N, DC 20004-1206		ART UNIT	PAPER NUMBER
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			07/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/508,401	FILLATTI ET AL.				
		Examiner	Art Unit				
		Cathy K. Worley	1638				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
	ORTENED STATUTORY PERIOD FOR REPLY	/ IS SET TO EVOIDE 4 MONTH	(C) OD THIDTY (30) DAVC				
WHIC - Exter after - If NO - Failu Any	CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.15 SIX (6) MONTHS from the mailing date of this communication. o period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be ting will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 21 Se	eptember 2004.					
• —	This action is FINAL. 2b)⊠ This action is non-final.						
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims						
4)⊠	4)⊠ Claim(s) <u>1-72</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
·	5) Claim(s) is/are allowed.						
•	6) Claim(s) is/are rejected.						
•	Claim(s) is/are objected to.	election requirement	•				
8) Claim(s) 1-72 are subject to restriction and/or election requirement.							
Applicati	ion Papers						
•—	The specification is objected to by the Examine						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (	under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of:							
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>							
<ul> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
		•					
Attachmen	ot(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date							
3) Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal 6) Other:					

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## **DETAILED ACTION**

## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, 9-12, 22, 23, 25-30, and 39-72, drawn to soybean seeds exhibiting altered oil composition and soybean plants that produce such seeds and nucleic acids capable of suppressing expression of FAD2, FAD3, or FATB genes and increasing expression of beta-ketoacyl-ACP synthase I, beta-ketoacyl-ACP synthase IV or delta-9-desaturase genes. If this group is selected, there is an additional election of species requirement.

Group II, claim(s) 7 and 13-21, drawn to soybean oil with increased oleic acid content and reduced saturated and polyunsaturated fatty acid content.

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Group III, claim(s) 8, drawn to soybean meal.

Group IV, claim(s) 24, drawn to feedstock.

Group V, claim(s) 31-38, drawn to a method of altering the oil composition of a plant or plant cell or seed.

2. The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking groups I-V is soybean oil that exhibits an increased oleic acid content, a reduced saturated fatty acid content, and a reduced polyunsaturated fatty acid content. Martin et al teach soybean oil from a mutant soybean plant called "A5" (Plant Phys. (1986), Vol. 81, pp. 41-44). The oil from A5 has increased oleic acid content, a reduced saturated fatty acid content, and a reduced polyunsaturated fatty acid content compared to a wild-type soybean variety referred to as "Williams" (see page 43, Table IV). Therefore, the technical feature linking the inventions of groups I-V does not constitute a special technical feature as defined by PCT Rule 13.2 as it does not define a contribution over the prior art.

Accordingly, Groups I-V are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

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3. This application contains claims directed to more than one species of the generic invention of Group I. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species within Group I are as follows:

- A) suppression of expression of FAD2 and increase in expression of betaketoacyl-ACP synthase I
- B) suppression of expression of FAD2 and increase in expression of betaketoacyl-ACP synthase IV
- C) suppression of expression of FAD2 and increase in expression of delta-9desaturase
- D) suppression of expression of FAD3 and increase in expression of betaketoacyl-ACP synthase I
- E) suppression of expression of FAD3 and increase in expression of betaketoacyl-ACP synthase IV
- F) suppression of expression of FAD3 and increase in expression of delta-9-desaturase
- G) suppression of expression of FATB and increase in expression of betaketoacyl-ACP synthase I
- H) suppression of expression of FATB and increase in expression of betaketoacyl-ACP synthase IV

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I) suppression of expression of FATB and increase in expression of delta-9desatura

If the Applicant elects Group I, then the Applicant is required, in reply to this action, to elect a single species (listed as A-I, above) to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The technical feature linking species A-I is the use of nucleic acid constructs to inhibit the expression of one gene and increase the expression of a different gene involved in fatty acid synthesis. Chapman et al (JAOCS (2001) Vol. 78, pp. 941-947)

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teach a DNA construct that is effective for the suppression of the expression of an endogenous FAD2 gene (see abstract and entire document). Singh et al (Planta (2001), Vol. 212, pp. 872-879) teach the expression of an epoxygenase gene that modifies fatty acid composition (see abstract and entire document). Therefore, the technical feature linking the species does not constitute a special technical feature as defined by PCT Rule 13.2 as it does not define a contribution over the prior art.

Accordingly, species A-I are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse.

To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds

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one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy K. Worley whose telephone number is (571) 272-8784. The examiner can normally be reached on M-F 10:00 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

ANNE MARIE GRUNBERG SUPERVISORY PATENT EXAMINER

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CKW/